GENERAL INDEX, VOLUME 114 (1964)

Aitken, I. A. Development of natural anti-Forssman hemolysin in young rabbits, 174
Antibacterial activity, action of human serum and plasma on *Escherichia coli* and *Aerobacter aerogenes*, 458
Antibody formation, effect of radiation, 285
Armstrong, A. S. and C. P. Sword. Cellular resistance in listeriosis, 258

Bankowski, R. A. See Yamanouchi
Beard, C. W. See White
Becla, E. See Krynski, 379
Bell, J. F. Abortive rabies infection. I. Experimental production in white mice and general discussion, 249
Bergdoll, M. S. See Sugiyama
Brodish, J. See Lutsky
Brubaker, R. R. and M. J. Surgalla. The effect of Ca^{++} and Mg^{++} on lysis, growth, and production of virulence antigens by *Pasteurella* pestis, 13
Brucella, species identity and epidemiology of strains isolated from Alaskan Eskimos, 169
Brucellosis,
  behavior of avirulent brucella in tissue culture monocytes, 441
  humoral factors in leukocytolysis, 321
Burnstein, T., J. H. Jensen and B. H. Waksman. The development of a neurotropic strain of measles virus in hamsters and mice, 265
Buthala, D. A. and M. G. Soret. Parainfluenza type 3 virus infection in hamsters: Virologic, serologic, and pathologic studies, 226; also see Patel

C-reactive protein in fractionated normal human serum, 429
Castrucci, G. See Saito
Chapin, M. See Dubes
Cholera,
  experimental infections in infant rabbits, 203
  passive immunity in experimental infections, 26
  phage-host relationships, 217
Clark, H F. Suckling mouse cataract agent, 476
Clemmer, D. I. Characterization of agents isolated from market chickens in a quest for enteric viruses, 386
Cohen, S. See Siegel
Colón, J. I. and J. B. Idoine. Factors affecting plaque formation by the infectious ribonucleic acid of the equine encephalitis viruses, 61
Coxsackie A-21 virus in human volunteers, 87
Crawford, C. See Hilgers
Cryptococcosis,
  experimental infection in dogs, 273
  serum protein enhancement of antibiotic therapy, 373
Cryptococcus neoformans, effect of cryptococcal polysaccharide on the reticuloendothelial system, 95

Davies, J. A. See Neptune, 39, 45; also see Weiss, 50
Davis, E. V. See Moore
Deibel, R. H., J. Yao, N. J. Jacobs and C. F. Niven, Jr. Group E streptococci. I. Physiological characterization of strains isolated from swine cervical abscesses, 327; also see Yao
Derrenbacher, E. B. See White, J. D.
Diphtheria toxin, effect of hypophysectomy and 2,2-bis (chlorophenyl)-1,1-dichloroethane on the adrenal cortical response, 107
Dixon, W. J. See Wentworth
Donaldson, D. M. See Gordon
Dougherty, M. See Slotnick
Dubes, G. R., F. H. Faas, D. G. Kelly, M. Chapin, R. D. Lamb and T. A. Lucas. A study of the facilitation of infection with surviving poliovirus units, 346
Dutta, N. K. See Finkelstein; also see Panse

Eisenstark, A. See Newman
Endocarditis, fluorescent antibody detection of an unclassified bacterial causative agent, 503
Enteroviruses,
  growth in embryonic mouse and embryonic human lung tissue culture, 189
  new agents from market chickens, 386
  pathogenicity in specific pathogen-free pigs, 450
Erlandson, A. L., Jr., M. A. Nemer and I. A. Pearson. Characteristics of various experimental human adult virulent *Escherichia coli* infections in mice, 163
Escherichia coli,
  control of growth in vitro and in vivo, 235
  infection of mice with human adult virulent strains, 163
Equine encephalitis viruses, plaque formation by infectious RNA, 61

Faas, F. H. See Dubes
Feeley, J. C. and M. J. Pickett. In vitro immunologic cellular injury in experimental brucellosis. II. The role of humoral factors in leukocytolysis, 321; also see McIntyre
Finkelstein, R. A., H. T. Norris and N. K. Dutta. Pathogenesis of experimental cholera in infant rabbits. I. Observations on the intraintestinal infection and experimental cholera produced with cell-free products, 203
Fishel, C. W. See Vedros
Freeman, B. A., G. R. Pearson and W. D. Hines. Host-parasite relationships in brucellosis. III. Behavior of avirulent brucella in tissue culture monocytes, 441
Frenkel, E. P. See Gadebusch
Freter, R. See Ozawa

Gadebusch, H. H., P. A. Ward and E. P. Frenkel. Natural host resistance to infection with *Cryptococcus neoformans*. III. The effect of cryptococcal polysaccharide upon the physiology of the reticulo-endothelial system of laboratory animals, 95
Gardner, E. W., S. T. Lyles and C. E. Lankford. A comparison of virulence of *Vibrio cholerae* strains for the embryonated egg, 412
Garrison, D., M. Vaivods and W. J. Nungester. A comparison of the antibacterial activity of human serum and oxalated plasma on strains of *Escherichia coli* and *Aerobacter aerogenes*, 458
Germicides, triarylborane complexes, 304
Gordon, Milton, D. M. Donaldson and G. G. Wright. Immunization of mice with irradiated *Pasteurella tularensis*, 435
Gordon, Morris A. and E. Lapa. Serum protein enhancement of antibiotic therapy in cryptococcosis, 373
Gorham, J. R., R. W. Leader and J. B. Henson. The experimental transmission of a virus causing hypergammaglobulinemia in mink: Sources and modes of transmission, 341
Griffith, W. R. See White
Guber, M. D. See Scheff

Heitmann, R. See Krasner
Heller, B. See Sugiyama
Hemolysin, natural anti-Forssman in young rabbits, 174
Henson, J. B. See Gorham
Hilgers, H., C. Lasalla, C. Crawford and J. Nichols. Effects of hypophysectomy and 2,2-bis(chlorophenyl)-1,1-dichloroethane on the adrenal cortical response to diphtheria toxin, 107
Hines, W. D. See Freeman
Hooser, L. E. See Moore
Howarth, J. A. See Yamanouchi
Howe, C. D. See Sinkovics
Hypergammaglobulinemia in mink, experimental transmission of the causative virus, 341

Idoine, J. B. See Colón

Jacobs, N. J. See Deibel; also see Yao
Jensen, J. H. See Burnstein
Jhala, H. I. See Panse

Kaminska, M. See Krynski, 193
Kedzia, W. See Krynski, 193
Kelly, D. G. See Dubes
Kimble, E. T., III. See Singer
Kloetzel, K. The incorporation of C^{14}-labeled glucose and leucine into the brain proteins of white mice injected with tetanus toxin, 157
Krasner, R. I., G. Young and R. Heitmann. The presence of a virulence factor in M protein extracts of group A streptococci. I. The enhancement of virulence of homologous streptococci by these extracts, 401
Krynski, S. and E. Becla. Infection of the body louse with

GENERAL INDEX, VOLUME 114 (1964)

Aitken, I. A. Development of natural anti-Forssman hemolysin in young rabbits, 174
Antibacterial activity, action of human serum and plasma on *Escherichia coli* and *Aerobacter aerogenes*, 458
Antibody formation, effect of radiation, 285
Armstrong, A. S. and C. P. Sword. Cellular resistance in listeriosis, 258

Bankowski, R. A. See Yamanouchi
Beard, C. W. See White
Becla, E. See Krynski, 379
Bell, J. F. Abortive rabies infection. I. Experimental production in white mice and general discussion, 249
Bergdoll, M. S. See Sugiyama
Brodish, J. See Lutsky
Brubaker, R. R. and M. J. Surgalla. The effect of Ca^{++} and Mg^{++} on lysis, growth, and production of virulence antigens by *Pasteurella* pestis, 13
Brucella, species identity and epidemiology of strains isolated from Alaskan Eskimos, 169
Brucellosis,
  behavior of avirulent brucella in tissue culture monocytes, 441
  humoral factors in leukocytolysis, 321
Burnstein, T., J. H. Jensen and B. H. Waksman. The development of a neurotropic strain of measles virus in hamsters and mice, 265
Buthala, D. A. and M. G. Soret. Parainfluenza type 3 virus infection in hamsters: Virologic, serologic, and pathologic studies, 226; also see Patel

C-reactive protein in fractionated normal human serum, 429
Castrucci, G. See Saito
Chapin, M. See Dubes
Cholera,
  experimental infections in infant rabbits, 203
  passive immunity in experimental infections, 26
  phage-host relationships, 217
Clark, H F. Suckling mouse cataract agent, 476
Clemmer, D. I. Characterization of agents isolated from market chickens in a quest for enteric viruses, 386
Cohen, S. See Siegel
Colón, J. I. and J. B. Idoine. Factors affecting plaque formation by the infectious ribonucleic acid of the equine encephalitis viruses, 61
Coxsackie A-21 virus in human volunteers, 87
Crawford, C. See Hilgers
Cryptococcosis,
  experimental infection in dogs, 273
  serum protein enhancement of antibiotic therapy, 373
Cryptococcus neoformans, effect of cryptococcal polysaccharide on the reticuloendothelial system, 95

Davies, J. A. See Neptune, 39, 45; also see Weiss, 50
Davis, E. V. See Moore
Deibel, R. H., J. Yao, N. J. Jacobs and C. F. Niven, Jr. Group E streptococci. I. Physiological characterization of strains isolated from swine cervical abscesses, 327; also see Yao
Derrenbacher, E. B. See White, J. D.
Diphtheria toxin, effect of hypophysectomy and 2,2-bis (chlorophenyl)-1,1-dichloroethane on the adrenal cortical response, 107
Dixon, W. J. See Wentworth
Donaldson, D. M. See Gordon
Dougherty, M. See Slotnick
Dubes, G. R., F. H. Faas, D. G. Kelly, M. Chapin, R. D. Lamb and T. A. Lucas. A study of the facilitation of infection with surviving poliovirus units, 346
Dutta, N. K. See Finkelstein; also see Panse

Eisenstark, A. See Newman
Endocarditis, fluorescent antibody detection of an unclassified bacterial causative agent, 503
Enteroviruses,
  growth in embryonic mouse and embryonic human lung tissue culture, 189
  new agents from market chickens, 386
  pathogenicity in specific pathogen-free pigs, 450
Erlandson, A. L., Jr., M. A. Nemer and I. A. Pearson. Characteristics of various experimental human adult virulent *Escherichia coli* infections in mice, 163
Escherichia coli,
  control of growth in vitro and in vivo, 235
  infection of mice with human adult virulent strains, 163
Equine encephalitis viruses, plaque formation by infectious RNA, 61

Faas, F. H. See Dubes
Feeley, J. C. and M. J. Pickett. In vitro immunologic cellular injury in experimental brucellosis. II. The role of humoral factors in leukocytolysis, 321; also see McIntyre
Finkelstein, R. A., H. T. Norris and N. K. Dutta. Pathogenesis of experimental cholera in infant rabbits. I. Observations on the intraintestinal infection and experimental cholera produced with cell-free products, 203
Fishel, C. W. See Vedros
Freeman, B. A., G. R. Pearson and W. D. Hines. Host-parasite relationships in brucellosis. III. Behavior of avirulent brucella in tissue culture monocytes, 441
Frenkel, E. P. See Gadebusch
Freter, R. See Ozawa

Gadebusch, H. H., P. A. Ward and E. P. Frenkel. Natural host resistance to infection with *Cryptococcus neoformans*. III. The effect of cryptococcal polysaccharide upon the physiology of the reticulo-endothelial system of laboratory animals, 95
Gardner, E. W., S. T. Lyles and C. E. Lankford. A comparison of virulence of *Vibrio cholerae* strains for the embryonated egg, 412
Garrison, D., M. Vaivods and W. J. Nungester. A comparison of the antibacterial activity of human serum and oxalated plasma on strains of *Escherichia coli* and *Aerobacter aerogenes*, 458
Germicides, triarylborane complexes, 304
Gordon, Milton, D. M. Donaldson and G. G. Wright. Immunization of mice with irradiated *Pasteurella tularensis*, 435
Gordon, Morris A. and E. Lapa. Serum protein enhancement of antibiotic therapy in cryptococcosis, 373
Gorham, J. R., R. W. Leader and J. B. Henson. The experimental transmission of a virus causing hypergammaglobulinemia in mink: Sources and modes of transmission, 341
Griffith, W. R. See White
Guber, M. D. See Scheff

Heitmann, R. See Krasner
Heller, B. See Sugiyama
Hemolysin, natural anti-Forssman in young rabbits, 174
Henson, J. B. See Gorham
Hilgers, H., C. Lasalla, C. Crawford and J. Nichols. Effects of hypophysectomy and 2,2-bis(chlorophenyl)-1,1-dichloroethane on the adrenal cortical response to diphtheria toxin, 107
Hines, W. D. See Freeman
Hooser, L. E. See Moore
Howarth, J. A. See Yamanouchi
Howe, C. D. See Sinkovics
Hypergammaglobulinemia in mink, experimental transmission of the causative virus, 341

Idoine, J. B. See Colón

Jacobs, N. J. See Deibel; also see Yao
Jensen, J. H. See Burnstein
Jhala, H. I. See Panse

Kaminska, M. See Krynski, 193
Kedzia, W. See Krynski, 193
Kelly, D. G. See Dubes
Kimble, E. T., III. See Singer
Kloetzel, K. The incorporation of C^{14}-labeled glucose and leucine into the brain proteins of white mice injected with tetanus toxin, 157
Krasner, R. I., G. Young and R. Heitmann. The presence of a virulence factor in M protein extracts of group A streptococci. I. The enhancement of virulence of homologous streptococci by these extracts, 401
Krynski, S. and E. Becla. Infection of the body louse with

Pasteurella pseudotuberculosis after intrarectal inoculation, 379
Krynski, S., W. Kedzia and M. Kaminska. Some differences between staphylococci isolated from pus and from healthy carriers, 193

Lamb, R. D. See Dubes
Lankford, C. E. See Gardner
Lapa, E. See Gordon
Lasalla, C. See Hilgers
Leader, R. W. See Gorham
Leptospires, ultrastructure of hooked and nonhooked species, 69
Leukemia, mouse, spleen tissue cultures, 359
Listeriosis, cellular resistance, 258
Lucas, T. A. See Dubes
Lutsky, I. and J. Brodish. Experimental canine cryptococcosis, 273
Lyles, S. T. See Gardner

McIntyre, O. R. and J. C. Feeley. Passive serum protection of the infant rabbit against experimental cholera, 468
McKercher, D. G. See Saito
McKissic, E. M., Jr. See Sugiyama
Maedi, isolation of a viral agent from lungs of infected sheep, 55
Mason, A. D., Jr. See Teplitz
Measles virus, development of a neurotropic strain in hamsters, 265
Mergenhagen, S. E. See Thonard
Mertz, J. A. See Slotnick
Meyer, M. E. Species identity and epidemiology of *Brucella* strains isolated from Alaskan Eskimos, 169
Moncrief, J. A. See Teplitz
Moore, M. L., L. E. Hooser, E. V. Davis and R. A. Siem. Comparative growth of prototype enteroviruses in embryonic mouse and embryonic human lung tissue cultures, 189
Murray, E. S. Guinea pig inclusion conjunctivitis virus. I. Isolation and identification as a member of the psittacosis-lymphogranuloma trachoma group, 1
Myxoma virus, live vaccine, 417

Nemer, M. A. See Erlandson
Neptune, E. M., Jr., E. Weiss and J. A. Davies. Lipid metabolism of the rickettsia-like microorganism *Wolbachia persica*. II. Studies with labeled nonlipid substrates, 45; also see Weiss
Neptune, E. M., Jr., E. Weiss, J. A. Davies and E. C. Suitor, Jr. Lipid metabolism of the rickettsia-like microorganism *Wolbachia persica*. I. Incorporation of long chain fatty acids into phosphates, 39
Newman, F. S. and A. Eisenstark. Phage-host relationships in *Vibrio cholerae*, 217
Nichols, J. See Hilgers
Niven, C. F., Jr. See Deibel; also see Yao
Norris, H. T. See Finkelstein
Nungester, W. J. See Garrison

Ozawa, A. and R. Freter. Ecological mechanism controlling growth of *Escherichia coli* in continuous flow cultures and in the mouse intestine, 235

Panse, M. V., H. I. Jhala and N. K. Dutta. Passive immunity in experimental cholera, 26
Paragonimiasis, immunodiagnosis, 311, 315
Parainfluenza type 3 virus, infection in hamsters, 226
Pasteurella pestis, effect of Ca^{++} and Mg^{++} on various properties, 13
Pasteurella pseudotuberculosis, infection of the body louse, 379
Pasteurella tularensis, irradiated vaccine, 435
Patel, N., D. A. Buthala and J. S. Walker. Controlled studies of Coxsackie A-21 (Coe) virus in volunteers, 87
Pearson, G. R. See Freeman
Pearson, I. A. See Erlandson
Pickett, M. J. See Feeley
Poliovirus, facilitation of infection with surviving units, 346
Prickett, P. A. See White, J. D.
Pseudomonas pyelonephritis in rats, 75
Psittacosis group, guinea pig inclusion conjunctivitis virus, 1

Rabies virus, abortive infection in mice, 249
Raulston, G. L. See Teplitz
Ritts, R. E., Jr. See Singer
Romig, W. R. See Wentworth
Rooney, J. R. See White
Rooster wattle infection, disaggregation of ground substance, 31

Saito, J. K., D. G. McKercher and G. Castrucci. Attenuation of the myxoma virus and use of the living attenuated virus as an immunizing agent for myxomatosis, 417
Sawada, T., K. Takei and K. Yoneyama. Studies on the immunodiagnosis of paragonimiasis. I. The precipitin reaction with crude and fractionated antigens, 311; II. Intradermal tests with fractionated antigens, 315
Scheff, G. J. and M. D. Guber. Glutathione instability and changes in protein-bound sugar in rats due to mixed bartonella and trypanosome infection, 152
Scherp, H. W. See Thonard
Seed, J. R. Factors responsible for destruction of the culture form of *Trypanosoma rhodesiense* in vivo, 119
Siegel, I. and S. Cohen. Action of staphylococcal toxin on human platelets, 488
Siem, R. A. See Moore
Sigurdardóttir, B. and H. Thormar. Isolation of a viral agent from the lungs of sheep affected with maedi, 55
Simon, H. J. Epidemiology and pathogenesis of staphylococcal infection. II. The effect of crowding upon an experimentally induced attenuated staphylococcal infection, 80
Simpson, C. F. and F. W. White. Ultrastructural variations between hooked and nonhooked leptospires, 69
Singer, I., E. T. Kimble, III and R. E. Ritts, Jr. Alterations of the host-parasite relationship by administration of endotoxin to mice with infections of trypanosomes, 243
Sinkovics, J. G. and C. D. Howe. Growth characteristics, virus yield, and interferon assay of leukemic mouse spleen tissue cultures, 359
Slotnick, I. J., J. A. Mertz and M. Dougherty. Fluorescent antibody detection of human occurrence of an unclassified bacterial group causing endocarditis, 503
Soret, M. G. See Buthala
Staphylococcal enterotoxin, enhancement of bacterial endotoxin lethality, 111
Staphylococcal phage types, reproducibility, 179
Staphylococci,
  action of toxin on human platelets, 488
  effect of crowding upon experimental infections, 80
  properties of isolates from different sources, 193
Streptococci,
  group A, virulence factor in protein extracts, 401
  group E, in swine cervical abscesses, 327, 333
Suckling mouse cataract agent, 476
Sugiyama, H., E. M. McKissic, Jr., M. S. Bergdoll and B. Heller. Enhancement of bacterial endotoxin lethality by staphylococcal enterotoxin, 111
Suitor, E. C., Jr. Studies on the cell envelope of *Wolbachia persica*, 125; also see Neptune, 39
Surgalla, M. J. See Brubaker
Sword, C. P. See Armstrong

Takei, K. See Sawada
Taliaferro, L. G. See Taliaferro, W. H.
Taliaferro, W. H. and L. G. Taliaferro. The relation of radiation dosage to enhancement, depression, and recovery of the initial Forssman hemolysin response in rabbits, 285
Teplitz, C., G. L. Raulston, J. I. Walker, A. D. Mason, Jr. and J. A. Moncrief. Spontaneous hematogenous *Pseudomonas* pyelonephritis in rats, 75
Tetanus toxin, incorporation of glucose and leucine into brain proteins of injected mice, 157
Thonard, J. C., S. E. Mergenhagen and H. W. Scherp. Studies on synergistic infections. II. Disaggregation of ground substance in rooster wattle infections, 31
Thormar, H. See Sigurdardóttir
Trypanosoma equiperdum, mixed infection with bartonella in rats, glutathione instability, 152
Trypanosoma rhodesiense, destruction of the culture form in vivo, 119
Trypanosomes, effect of endotoxin on infection in mice, 243
Tuberculosis, experimental infection in mice, acute pulmonary granulomatous response, 135
Tularemia, experimental respiratory infection in monkeys, 277

Updegraff, D. M. Triarylborane complexes, a new series of broad spectrum germicides, 304

Vaivods, M. See Garrison
Vedros, N. A. and C. W. Fishel. The presence of C-reactive protein in fractionated normal human sera, 429
Vibrio cholerae,
  passive serum protection of the infant rabbit, 468
  virulence for the embryonated egg, 412

Waksman, B. H. See Burnstein
Walker, H. I. See Teplitz
Walker, J. S. See Patel
Ward, P. A. See Gadebusch
Weiss, E., E. M. Neptune, Jr. and J. A. Davies. Lipid metabolism of the rickettsia-like microorganism *Wolbachia persica*. III. Comparison with other metabolic activities, 50; also see Neptune 39, 45
Wentworth, B. B., W. R. Romig and W. J. Dixon. The reproducibility of staphylococcal phage types, 179

White, F. W. See Simpson
White, J. D., J. R. Rooney, P. A. Prickett, E. B. Derrenbacher, C. W. Beard and W. R. Griffith. Pathogenesis of experimental respiratory tularemia in monkeys, 277
Walbachia persica,
cell envelope, 125
lipid metabolism, 39, 45, 50
Wright, G. G. See Gordon

Yamanouchi, K., R. A. Bankowski and J. A. Howarth. Pathogenicity of E1 and E4 strains of porcine enteroviruses in specific pathogen-free pigs, 450
Yao, J., N. J. Jacobs, R. H. Deibel and C. F. Niven, Jr. Group F streptococci. II. Serological characterization of strains from swine cervical abscesses, 333; also see Deibel
Yoneyama, K. See Sawada
Youmans, A. S. See Youmans, G. P.
Youmans, G. P. and A. S. Youmans. An acute pulmonary granulomatous response in mice produced by mycobacterial cells and its relation to increased resistance and increased susceptibility to experimental tuberculous infection, 135
Young, G. See Krasner

THE JOURNAL OF INFECTIOUS DISEASES

Founded in 1904 by The John Rockefeller McCormick Memorial
Institute for Infectious Diseases under the
Editorship of Ludvig Hektoen and Edwin O. Jordan

Edited by James W. Moulder

Advisory Editors: R. S. Benham, Arthur Brown, William Burrows,
G. M. Dack, J. K. Frenkel, Rolf Freter, F. B. Gordon, Dorothy Hamre,
S. A. Koser, Carl Lamanna, R. M. Lewert, C. G. Loosli, K. F. Meyer,
C. F. Niven, Jr., M. J. Pickett, J. C. Sherris, M. J. Surgalla, Emanuel Suter,
W. H. Taliaferro, D. W. Talmage, Emilio Weiss

Volume 114

1964

Published for the John Rockefeller McCormick Memorial Fund
of the University of Chicago

THE UNIVERSITY OF CHICAGO PRESS

THE JOURNAL OF INFECTIOUS DISEASES

Volume 114, February-December 1964

TABLE OF CONTENTS

No. 1, February, 1964

PAGE

Edward S. Murray. Guinea pig inclusion conjunctivitis virus. I. Isolation and identification as a member of the psittacosis-lymphogranuloma-trachoma group 1

R. R. Brubaker and M. J. Surgalla. The effect of Ca^{++} and Mg^{++} on lysis, growth, and production of virulence antigens by *Pasteurella pestis* 13

M. V. Panse, H. I. Jhala and N. K. Dutta. Passive immunity in experimental cholera 26

J. C. Thonard, S. E. Mergenhagen and H. W. Scherp. Studies on synergistic infections. II. Disaggregation of ground substance in rooster wattle infections 31

E. M. Neptune, Jr., E. Weiss, J. A. Davies and E. C. Suitor, Jr. Lipid metabolism of the rickettsialike microorganism *Wolbachia persica*. I. Incorporation of long chain fatty acids into phosphatides 39

E. M. Neptune, Jr., E. Weiss and J. A. Davies. Lipid metabolism of the rickettsialike microorganism *Wolbachia persica*. II. Studies with labeled nonlipid substrates 45

E. Weiss, E. M. Neptune, Jr., and J. A. Davies. Lipid metabolism of the rickettsialike microorganism *Wolbachia persica*. III. Comparison with other metabolic activities 50

Bergthóra Sigurdardóttir and Halldór Thormar. Isolation of a viral agent from the lungs of sheep affected with maedi 55

Julio I. Colón and Jane B. Idoine. Factors affecting plaque formation by the infectious ribonucleic acid of the equine encephalitis viruses 61

Charles F. Simpson and F. W. White. Ultrastructural variations between hooked and nonhooked leptospires 69

Carl Teplitz, Gilbert L. Raulston, Harrel L. Walker, Arthur D. Mason, Jr. and John A. Moncrief. Spontaneous hematogenous *Pseudomonas* pyelonephritis in rats 75

Harold J. Simon. Epidemiology and pathogenesis of staphylococcal infection. II. The effect of crowding upon an experimentally induced attenuated staphylococcal infection 80

Natoo Patel, Darwin A. Buthala and John S. Walker. Controlled studies of Coxsackie A-21 (Coe) virus in volunteers 87

Hans H. Gadebusch, Peter A. Ward and Eugene P. Frenkel. Natural host resistance to infection with *Cryptococcus neoformans*. III. The effect of cryptococcal polysaccharide upon the physiology of the reticuloendothelial system of laboratory animals 95

No. 2, April, 1964

Herbert Hilgers, Clara Lasalla, Chester Crawford and John Nichols. Effects of hypophysectomy and 2,2-bis(chlorophenyl)-1,1-dichloroethane on the adrenal cortical response to diphtheria toxin 107

H. Sugiyama, E. M. McKissic, Jr., M. S. Bergdoll and B. Heller. Enhancement of bacterial endotoxin lethality by staphylococcal enterotoxin 111

John Richard Seed. Factors responsible for destruction of the culture form of *Trypanosoma rhodesiense* in vivo 119

EARL C. SUITOR, JR. Studies on the cell envelope of *Wolbachia persica* 125
GUY P. YOUMANS AND ANNE S. YOUMANS. An acute pulmonary granulomatous response in mice produced by mycobacterial cells and its relation to increased resistance and increased susceptibility to experimental tuberculous infection 135
GEORGE J. SCHEFF AND MICHAEL D. GUBER. Glutathione instability and changes in protein-bound sugar in rats due to mixed bartonella and trypanosome infection 152
KURT KLOETZEL. The incorporation of C^{14}-labeled glucose and leucine into the brain proteins of white mice injected with tetanus toxin 157
ARVID L. ERLANDSON, JR., MARY A. NEMER AND IRIS A. PEARSON. Characteristics of various experimental human adult virulent *Escherichia coli* infections in mice 163
MARGARET E. MEYER. Species identity and epidemiology of *Brucella* strains isolated from Alaskan Eskimos 169
IAN D. AITKEN. Development of natural anti-Forssman hemolysin in young rabbits 174
BERTTINA B. WENTWORTH, W. R. ROMIG AND W. J. DIXON. The reproducibility of staphylococcal phage types 179
MARIAN L. MOORE, LAWRENCE E. HOOSER, ELDON V. DAVIS AND ROBERT A. SIEM. Comparative growth of prototype enteroviruses in embryonic mouse and embryonic human lung tissue cultures 189

No. 3, JUNE, 1964

STEFAN KRYNSKI, WLODZIMIERZ KEDZIA AND MARIA KAMINSKA. Some differences between staphylococci isolated from pus and from healthy carriers ... 193
RICHARD A. FINKELSTEIN, H. THOMAS NORRIS AND N. K. DUTTA. Pathogenesis of experimental cholera in infant rabbits. I. Observations on the intraintestinal infection and experimental cholera produced with cell-free products 203
F. S. NEWMAN AND A. EISENSTARK. Phage-host relationships in *Vibrio cholerae* 217
D. A. BUTHALA AND M. G. SORET. Parainfluenza type 3 virus infection in hamsters: Virologic, serologic, and pathologic studies 226
ATSUSHI OZAWA AND ROLF FRETER. Ecological mechanism controlling growth of *Escherichia coli* in continuous flow cultures and in the mouse intestine .. 235
IRA SINGER, EDWARD T. KIMBLE, III AND ROY E. RITTS, JR. Alterations of the host-parasite relationship by administration of endotoxin to mice with infections of trypanosomes 243
J. FREDERICK BELL. Abortive rabies infection. I. Experimental production in white mice and general discussion 249
A. S. ARMSTRONG AND C. P. SWORD. Cellular resistance in listeriosis 258
THEODORE BURNSTEIN, JOHN H. JENSEN AND BYRON H. WAKSMAN. The development of a neurotropic strain of measles virus in hamsters and mice .. 265
IRVING LUTSKY AND JEROME BRODISH. Experimental canine cryptococcosis .. 273
JOHN D. WHITE, JAMES R. ROONEY, PATRICIA A. PRICKETT, EDWARD B. DERRENBACHER, CHARLES W. BEARD AND WILLIAM R. GRIFFITH. Pathogenesis of experimental respiratory tularemia in monkeys 277

No. 4, OCTOBER, 1964

WILLIAM H. TALIAFERRO AND LUCY G. TALIAFORRO. The relation of radiation dosage to enhancement, depression, and recovery of the initial Forssman hemolysin response in rabbits 285
D. M. UPDEGRAFF. Triarylborane complexes, a new series of broad spectrum germicides 304
TOSHISADA SAWADA, KAZUTOSHI TAKEI AND KUNIHIKO YONEYAMA. Studies on the immunodiagnosis of paragonimiasis. I. The precipitin reaction with crude and fractionated antigens 311

TOSHISADA SAWADA, KAZUTOSHI TAKEI AND KUNIHIKO YONEYAMA. Studies on the immunodiagnosis of paragonimiasis. II. Intradermal tests with fractionated antigens 315
J. C. FEELEY AND M. J. PICKETT. In vitro immunologic cellular injury in experimental brucellosis. II. The role of humoral factors in leukocytolysis 321
R. H. DEIBEL, J. YAO, N. J. JACOBS AND C. F. NIVEN, JR. Group E streptococci. I. Physiological characterization of strains isolated from swine cervical abscesses 327
JUDITH YAO, N. J. JACOBS, R. H. DEIBEL AND C. F. NIVEN, JR. Group E streptococci. II. Serological characterization of strains from swine cervical abscesses 333
JOHN R. GORHAM, ROBERT W. LEADER AND JAMES B. HENSON. The experimental transmission of a virus causing hypergammaglobulinemia in mink: Sources and modes of infection 341
GEORGE R. DUBES, FRED H. FAAS, DOROTHY G. KELLY, MARGARET CHAPIN, R. DUANE LAMB AND THOMAS A. LUCAS. A study of the facilitation of infection with surviving poliovirus units 346
JOSEPH G. SINKOVICS AND CLIFTON D. HOWE. Growth characteristics, virus yield, and interferon assay of leukemic mouse spleen tissue cultures 359
MORRIS A. GORDON AND EDWARD LAPA. Serum protein enhancement of antibiotic therapy in cryptococcosis 373

No. 5, DECEMBER, 1964

STEFAN KRYNSKI AND EUGENIUSZ BECLA. Infection of the body louse with *Pasteurella pseudotuberculosis* after intrarectal inoculation 379
D. I. CLEMMER. Characterization of agents isolated from market chickens in a quest for enteric viruses 386
ROBERT I. KRASNER, GENEVIEVE YOUNG AND ROSEMARY HEITMANN. The presence of a virulence factor in M protein extracts of group A streptococci. I. The enhancement of virulence of homologous streptococci by these extracts 401
E. W. GARDNER, S. T. LYLES AND C. E. LANKFORD. A comparison of virulence of *Vibrio cholerae* strains for the embryonated egg 412
J. K. SAITO, D. G. MCKERCHER AND G. CASTRUCCI. Attenuation of the myxoma virus and use of the living attenuated virus as an immunizing agent for myxomatosis 417
NEYLAN A. VEDROS AND CHARLES W. FISHEL. The presence of C-reactive protein in fractionated normal human sera 429
MILTON GORDON, DAVID M. DONALDSON AND GEORGE G. WRIGHT. Immunization of mice with irradiated *Pasteurella tularensis* 435
BOB A. FREEMAN, GARY R. PEARSON AND WILLIAM D. HINES. Host-parasite relationships in brucellosis. III. Behavior of avirulent brucella in tissue culture monocytes 411
K. YAMANOUCHI, R. A. BANKOWSKI AND J. A. HOWARTH. Pathogenicity of E1 and E4 strains of porcine enteroviruses in specific pathogen-free pigs 450
DELNA GARRISON, MARA VAIVODS AND W. J. NUNGESTER. A comparison of the antibacterial activity of human serum and oxalated plasma on strains of *Escherichia coli* and *Aerobacter aerogenes* 458
O. ROSS MCINTYRE AND JOHN C. FEELEY. Passive serum protection of the infant rabbit against experimental cholera 468
H FRED CLARK. Suckling mouse cataract agent 476
ISRAEL SIEGEL AND SIDNEY COHEN. Action of staphylococcal toxin on human platelets 488
IRVING J. SLOTNICK, JO ANN MERTZ AND MARY DOUGHERTY. Fluorescent antibody detection of human occurrence of an unclassified bacterial group causing endocarditis 503
INDEX 506